Sustainable Water Management Initiative
Technical Subcommittee Meeting Summary
November 9, 2010
DRAFT

Attendees

Committee Chairs: Anne Carroll (DCR), Jack Buckley (FWE), Martin Suuberg (DEP)
Committee Members: Ralph Abele (EPA), Colin Apse (TNC), Sue Beede (Mass Rivers Alliance), Tom Cambereri (Cape Cod Commission), Doug DeNatale (AECOM), Eric Hooper (Town of Sharon), David Kaplan (City of Cambridge), Kerry Mackin (Ipswich River Watershed Association), Piotr Parasiewicz (Rushing Rivers), Cary Parsons (Woodard & Curran), Nigel Pickering (Charles River Watershed Association), Chris Waldron for Peter Weiskel (USGS); Brian Wick (Cape Cod Cranberry Growers' Association), Vicki Zoltay (ABT Assoc.)
Other Attendees: Kathy Baskin (EEA), Julia Blatt (Mass Rivers Alliance), John Clarkeson (EEA), Tyler Corson-Reickert (intern), Karen Crocker (DEP), Rebecca Cutting (DEP), Jeff Davis (UMass Donahue Institute), Jen D'Urso (DEP), Richard Friend (DEP), David Glater (Trout Unlimited), Bruce Hanson (DCR), Linda Hutchins (DCR), Steve Kaiser (Assoc. of Cambridge Neighborhoods), Duane LeVangie (DEP), Steve Long (TNC), Beth McCann (DEP), Jennifer Pederson (MWWA), Tim Purinton (FWE), Vandana Rao (EEA), Heidi Ricci (MA Audubon), Todd Richards (FWE), Gerry Szal (DEP), Eli Terrace (intern), Mark Tisa (FWE), Jonathan Yeo (DCR)

November 9 Meeting Objectives

- Introduction and discussion of potential seasonal streamflow criteria
- Brainstorming discussion on goal classes
- Provide an update on mapping efforts for water supply categories

All presentations and handouts are available on the SWM Technical Subcommittee Resources web page at: http://www.mass.gov/?pageID=eoeeaterminal&L=5&L0=Home&L1=Air%2c+Water+%26+Climate+Change&L2=Preserving+Water+Resources&L3=Sustainable+Water+Management&L4=Sustainable+Water+Management+Technical+SubCommittee&sid=Eoeea&b=terminalcontent&f=eea_swm_tech_subcomm_resources&csid=Eoeea

Action Items resulting from today's meeting:

Comments on Streamflow Criteria scenario run and goals accepted through November 19th. Comments should be directed to Project Manager Kathy Baskin at Kathleen.baskin@state.ma.us.

Welcome and Introductions

Jeff Davis, our facilitator, reminded us to please hold all questions until the end of the presentations, and to be careful to phrase questions and comments in a non-positional way

Streamflow Criteria *See presentation entitled "Streamflow Criteria" given by Todd Richard, DFG*

- Categories 1-5 are the starting point for the discussion
- Will use August alteration to describe seasonal use patterns
- Will develop maximum seasonal use that is protection
  - Using the biologically based streamflow categories as a background
- The Fish and Flow Study uses August flows
  - SWMI presentation goes on use SYE to develop a method to relate August flows to October, January and April flows

Hypothetical Basin Example

Basin Category	August		October		January		April	
	% Alt.	Volume	% Alt.	Volume	% Alt.	Volume	% Alt.	Volume
1	<5%	0.10	4.1%	0.11	1.7%	0.13	1.7%	0.27
2	<15%	0.27	7.8%	0.21	2.8%	0.22	1.7%	0.27
3	<35%	0.64	20.3%	0.54	6.8%	0.54	3.0%	0.47
4	<65%	1.19	37.1%	0.98	10.1%	0.80	6.6%	1.03
5	-		-		-		-	

- Permitting decisions could then be based on impact of proposed withdrawal on % alteration
- This is intended to provide a tool to be consulted when making decisions about permitting future use proposals.

Discussion:

- Should there be other biological criteria considered when developing seasonality? Anadromous Fish?
  - October was added to the SYE during the Mass Indicators study specifically to address anadromous fish, so they are already incorporated.
- Perhaps the site specific analysis should be run with the monthly SYE
- Perhaps this should be based on 7-day minimum
- Does this address low flows in consecutive years?
  - Looks to protect the natural hydrograph to avoid extreme low-flows year after year.
- When the new % alteration is calculated for new withdrawals, the analysis should incorporate any additional new return flows coming from discharge of the withdrawal, otherwise the analysis is too conservative.
- These figures review groundwater, not surface water.
- Where in the basin is the alteration calculated? At the outlet ("tipping point") of each basin.
- This is presented as a scenario application to present an example. To be used it should go through a full review to determine what factors should be included. Because this scenario uses the SYE data, return flows are included.

Goal Classes See Streamflow *See presentation entitled Criteria Goals Discussion given by Anne Carroll, DCR*

Summary of Goals the SWMI Committees have discussed:

- No backsliding
- Improve to at least a category 3
- Everyone goes up one
- Identify and protect water supply areas
- Identify and protect cold water fisheries and other high quality aquatic habitat
- "enough water for people and fish"

Goal Class Concept

- Goal Class is independent from, but informed by existing condition
    - 3 Example Goal Classes:
        - Goal Class 1: High Quality Aquatic Habitat
        - Goal Class 2: Statewide Standard
        - Goal Class 3: Major Water Supply Areas
    - Set Criteria for each Goal Class
    - Criteria drawn from flow alteration levels

Example Goal Class Criteria

Goal Classes	Flow Criteria Applies	Max Aug % alteration
Goal Class 1 – High Quality Aquatic Habitat	Level 1	5%
Goal Class 2 – Statewide Standard	Level 2	15%
Goal Class 3 – Major Water Supply Area	Level 3	35%

Goal classes could then be implemented in a variety of ways. For example:

- Example 1- no backsliding and manage towards a 3
- Example 2 - protects highest quality, allows backsliding

Discussion:

Discussion split along two points of view:

- Even when low flows are not the cause of biological degradation, withdrawals should not be allowed because flow reductions will further harm fish and water should be available in the event of restoration

vs.

- If a basin is Category 1 - 0-5% flow reduction, but is a Category 5 for fish habitat, then protecting flow through restricting or denying permits will not lead to an environmental improvement
- If cutting withdrawals will not affect biological category, then permitting should be allowed

Other comments included:

- One member opposed a water-supply oriented goal class as illegal because that would not minimize impacts
- Goal classes should be aimed toward ecological improvement, current technology will allow sophisticated withdrawal management for permitting.
- The process should incorporate improvement for Category 4 and 5 basins
- Economic development is part of the balancing required by the Water Management Act
- Without clearer identification of impacts caused by impervious cover (IC), this proposal is incomplete and could lead denying permits and economic hardship without any ecological improvement

- In some areas (western MA), DEP might need a process for permitting needed withdrawals in areas that are Category 1 for both flow and fisheries.
- If the data indicates there is a clear degredation of the watershed, it should trigger a review to determine how improvements can be made.

It was noted that the presentation was a starting framework – the SWMI process will need to both identify basins for improvement and basins for additional withdrawals to be implementable.

Comments on both Goals presentation accepted through November 19th.

Water Supply Metrics Update

Work continues on developing a "water supply metric" to identify areas where water supplies need protection and areas where future supplies could best be developed. The mapping of aquifers and public water supply sites in underway.

Wrap-Up & agenda planning for December

The schedule of upcoming meetings will be updated on the SWM website (see above).

As of the posting of these notes, the December meeting schedule is:

Wednesday December 8	1:00 PM to 3:30 PM SWM Technical Subcommittee 100 Cambridge St, 2nd floor Boston, MA
Tuesday December 14	10:00 AM to 12:30 PM Advisory Committee 100 Cambridge St, 2nd Floor Boston, MA

A follow up note from Jeff Davis, our facilitator, sent via email 29 November 2010.

Hello SWMI Committee Members and Stakeholders;

We welcome your input on the Sustainable Water Management Initiative. As a reminder, our guidelines are to send input to Kathy Baskin (*Kathleen.Baskin@state.ma.us*) who submits it to the appropriate entity for consideration: the Advisory Committee, the Technical Sub-Committee, the Steering Committee, or David Cash, EOEEA's Assistant Secretary for Policy.

Thank you for your continued cooperation regarding the submittal of comments. We look forward to keeping our momentum going in a positive direction, using direct communication in our committee and sub-group meetings.

Jeff Davis
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